

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE  
(REV. 12-2004)

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

112857-454

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

Unknown

**10/536934**INTERNATIONAL APPLICATION NO.  
**PCT/JP03/14975**INTERNATIONAL FILING DATE  
**November 25, 2003**PRIORITY DATE CLAIMED  
**December 10, 2002**TITLE OF INVENTION  
**POLYMER ACTUATOR**

APPLICANT(S) FOR DO/EO/US

**Ito et al.**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371 (c)(2))
  - a. ☒ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☒ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☒ A copy of the International Search Report (PCT/ISA/210).

**Items 13 to 23 below concern document(s) or information included:**

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☒ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A power of attorney and/or change of address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. ☒ Express Mail Label No. **EV 551757901 US**
23. ☒ Other items or information:

**Formal Drawings (4 sheets);  
Form PCT/IB/301, 304, 308, PCT/ISA/220, 210  
Return receipt postcard.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/536934</b> Unknown		INTERNATIONAL APPLICATION NO. <b>PCT/JP03/14975</b>		ATTORNEY'S DOCKET NUMBER <b>112857-454</b>	
24. The following fees are submitted:				Applicant use	Office use
<input checked="" type="checkbox"/> a) Basic national fee . . . . . \$300.00				\$	\$300.00
<input checked="" type="checkbox"/> b) Examination fee . . . . . \$200.00				\$	\$200.00
<input checked="" type="checkbox"/> c) Search fee . . . . . \$500.00				\$	\$500.00
<b>TOTAL OF ABOVE CALCULATIONS = \$1000.00</b>				\$	\$1,000.00
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE		
- 100 =	/50 =		x \$250.00	\$	\$0.00
Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	13 - 20 =	0	x \$50.00	\$	\$0.00
Independent claims	1 - 3 =	0	x \$200.00	\$	\$0.00
MULTIPLE DEPENDENT CLAIMS (if applicable) <input type="checkbox"/> + \$360.00				\$	\$0.00
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$	\$1,000.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	\$0.00
<b>SUBTOTAL =</b>				\$	\$1,000.00
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	\$0.00
<b>TOTAL NATIONAL FEE =</b>				\$	\$1,000.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +				\$	\$0.00
<b>TOTAL FEES ENCLOSED =</b>				\$	\$1,000.00
<b>Amount to be refunded:</b>					\$
<b>Amount to be charged:</b>					\$
<p>a. <input checked="" type="checkbox"/> A check in the amount of \$ <b>\$1,000.00</b> to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is _____</p> <p>c. <input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <b>02-1818</b>. A duplicate copy of this sheet is enclosed.</p> <p>d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.</p>					
<p><b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</p>					
<p>SEND ALL CORRESPONDENCE TO:</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>Thomas C. Basso</b> Bell, Boyd &amp; Lloyd LLC P.O. Box 1135 Chicago, IL 60690-1135</p> </div> <div style="width: 45%;"> <p>SIGNATURE <b>Thomas C. Basso</b></p> <p>NAME <b>46,541</b></p> <p>REGISTRATION NUMBER</p> </div> </div>					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Ito et al.  
Appl. No.: Unknown  
Filed: Herewith  
Title: POLYMER ACTUATOR  
Art Unit: Unknown  
Examiner: Unknown  
Docket No.: 112857-454

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING BY EXPRESS MAIL UNDER 37 CFR 1.10**

Sir:

I hereby certify that the following documents relating to the above-identified application:

- |   |   |
|---|---|
| 1. Transmittal Letter (dup.);   | 4. Unexecuted Dec. and POA (3 pgs.);            |
| 2. Int'l App. as filed including Int'l Search Report (26 pgs.);                           | 5. Preliminary Amendment (39 pgs.);             |
| 3. English Trans. of Int'l App. as filed (30 pgs.) including 8 sheets of Formal Drawings; | 6. Form PCT/IB/301, 304, 308, PCT/ISA/220, 210; |
|   | 7. Check in the amount of \$1,000.00; and       |
|   | 8. Return receipt postcard.                     |

are being deposited with the United States Postal Service with sufficient postage as  
Express Mail in an envelope addressed to:

Mail Stop PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

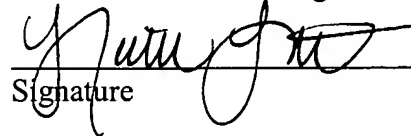
on May 27, 2005.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

Heather Foster

Name of Person Mailing Correspondence



Signature

EV 551757901 US

Express Mail Mailing Label Number